

CLAIMS

1. In combination:

(a) a roof gutter of the type for collecting rain and channeling the
5 rain to a down spout or the like; and

(b) a porous filler material comprising fiber, foam or combinations
thereof wherein the overall density of the porous filler material
is between about 10% - 70% by volume fraction and the pores
are elongated and generally extend in the lengthwise direction
10 of the porous filler material, and said porous filler material is
positioned in the roof gutter so as to substantially fill the roof
gutter and such that the pores generally extend in the rain flow
direction;

whereby rain water from the roof will readily pass through the porous filler
15 and be channeled away and leaves, pine straw and other similar debris will
be prevented from entering the roof gutter.

2. The combination according to claim 1 wherein the porous filler
material comprises homocomponent, bi-component or multi-
20 component fibers.

3. The combination according to claim 1 wherein the porous filler
material comprises hollow fibers.

4. The combination according to claim 1 wherein the porous filler material comprises multifilament or staple fibers having a diameter of 15 denier or less.
- 5 5. The combination according to claim 1 wherein the porous filler material comprises monofilament or multifilament fibers having a diameter greater than 15 denier.
6. The combination according to claim 1 wherein the porous filler
10 material comprises fiber or foam or combinations thereof selected from the group consisting of polyolefins, polyamides, polyester and co-polymers, natural fibers and combinations thereof.
7. The combination according to claim 1 wherein the porous filler
15 material comprises sheath/core fibers comprising sheaths that melt at a lower temperature than the cores of the fibers.
8. The combination according to claim 1 wherein the porous filler material comprises a web of fibers that have been formed by carding,
20 airlay, wetlay, spunbond, meltblown or any combination thereof.
9. The combination according to claim 1 wherein the porous filler material comprises both fibers and non-fibrous elements such as foam and sponges.

10. The combination according to claim 1 wherein the porous filler material comprises woven, knitted, braided or nonwoven material.

5 11. A method of preventing leaves, pine straw and similar debris from entering a roof gutter while allowing rainwater and the like to readily enter the roof gutter and be channeled away to a down spout or the like, the method comprising the steps of:

- (a) providing a roof gutter mounted adjacent the roof of a residential or commercial building; and
- 10 (b) inserting a porous filler material comprising fiber, foam or combinations thereof into the gutter so as to substantially fill the gutter with the porous filler material, the porous filler material having an overall density between about 10% - 70% by volume fraction and the pores thereof being elongated and
- 15 generally extending lengthwise in the direction of the porous filler material and in the rain flow direction within the gutter;

whereby rainwater from the roof will readily pass through the porous filler and be channeled away and the leaves, pine straw and similar debris will be prevented from entering the roof gutter.

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12. The method according to claim 11 including providing a porous filler material comprising homocomponent, bi-component or multicomponent fibers.

13. The method according to claim 11 including providing a porous filler material comprising hollow fibers.
14. The method according to claim 11 including providing a porous filler material comprising multifilament or staple fibers having a denier of 15 or less.
15. The method according to claim 11 including providing a porous filler material comprising monofilament fibers having a denier of 15 or greater.
16. The method according to claim 11 including providing a porous filler material comprising fiber, foam or combinations thereof selected from the group consisting of polyolefins, polyamides, polyester and copolymers, natural fibers and combinations thereof.
17. The method according to claim 11 including providing a porous filler material comprising sheath/core fibers wherein the sheaths will melt at a lower temperature than the cores of the fibers.
18. The method according to claim 11 including providing a porous filler material comprising a web of fibers that has been formed by carding, airlay, wetlay, spunbond, meltblown or combinations thereof.

19. The method according to claim 18 including forming the fibrous web from both fibers as well as nonfibrous elements such as foam or sponges.
- 5 20. The method according to claim 11 including providing a porous filler material comprising woven, knitted, braided or nonwoven material.